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BOTANIC GARDENS, GOVERNMENT HOUSE
GROUNDS AND DOMAIN.

REPORT FOR THE YEAR 1881.

By W. R. GUILFOYLE, DIRECTOR.

By Authority:
JOHN FERRES, GOVERNMENT PRINTER, MELBOURNE.

REPORT ON THE BOTANIC GARDENS, GOVERNMENT HOUSE GROUNDS AND DOMAIN, FOR 1881.

To the Hon. Walter Madden, M.P., Commissioner of Crown Lands and Survey.

SIR,

I have the honor to furnish you with a Report on the Botanic Gardens, Government House Grounds, and Domain, for the year 1881.

When the seasons were favorable, and when a cessation from watering intervened, advantage was taken of the opportunity thereby afforded of carrying out a few improvements; a detailed account of which will be given further on.

Although the early portions of the spring and summer months of 1881-82 were all that could be desired, I regret to have to say that, when the very severe drought set in, the water supply was altogether inadequate, so much so, that irrigation was rendered impossible, and had to be abandoned.

The staff, therefore, was called on to work overtime in the evening, so that the grass and the plants throughout the grounds might be kept alive by sprinkling.

The scarcity of a proper water supply at a most critical juncture is of periodical recurrence, and will always be so, until the supply-pipe to the reservoir in the Gardens has been increased in capacity. During the past year, as on former occasions, I have found the small engine a most useful auxiliary, one, in fact, indispensable under existing circumstances; but the large 20-horse power engine, which supplies the Albert Park lagoon as well as the Gardens, is able to afford an unlimited quantity of water to the latter, during the summer months, provided the present pipe is replaced by a larger one.

The reduction of the annual vote in 1880, and consequent reduction of the staff of the Gardens and Domain, is to be deplored, as it has not only crippled my efforts to carry on the remodelling which I had commenced and partially carried out, but has also prevented my maintaining the Grounds in proper order. Many things, therefore, remain in a very unfinished and unsightly condition. If say ten or twelve additional laborers could be employed for several years, the work of remodelling the Garden would be at an end, and, when once completed, a diminution of labor would naturally ensue, as stated in the Annual Report for 1876.

A place laid out in the form which I am giving to the Botanic Gardens will be easily kept in order after a year or two. Grass lawns can be mown by machine. The three large lawns lately formed in the Gardens can, as I have previously stated, be attended to and kept in order by the labor of one man and a horse, who could go over a much greater space in a week than is at present required; whereas, numerous borders of flowers, with walks occupying the same space, would necessitate a vast amount of labor and expense. Nor can anything in the way of extensive gardening be more suitable and beautiful than a succession of verdant lawns, broken by graceful groups of diversified foliage, and effectively arranged floral bloom.

Even the highest and most important feature in a Botanic Garden—the collection and scientific arrangement of plants—can be advantageously carried out in this manner, which combines the useful with the ornamental, and gratifies the taste of lovers of the picturesque and beautiful, while facilitating the researches of the botanical student.

Among others, who have availed themselves of the opportunities afforded here for the study of botany, I may mention Mr. T. Hurly, Vice-principal of the Training Institute for Teachers (Education Department, Melbourne), who has the direction of a large class of ladies, and who has succeeded during the year in passing a number of students in this branch of natural science.

The following is a condensed summary of the work effected for the year, with a few general observations as to the requirements of the Department :—

FERN GULLY.

The value of the thorough trenching and the addition of suitable soil to the slopes of the Fern Gully, effected some two years ago, is now apparent in the vigorous growth of the ferns and other plants generally.

Large numbers of ferns, both arborescent and dwarf, palms, including specimens of "*Nikau*" (*Areca sapida*) and *Livistona Australis* (cabbage palm), *Aralia papyrifera* (rice paper plant), *Cordylines*, *Marantas*, and *Musas* (bananas), have been planted in this locality during the year, and have grown admirably, especially *Musa ensete* (Bruce's banana), the finest of the genus as regards foliage.

The numerous climbers planted throughout the gully have been trained, so as to hang in festoons from the trees, or to form canopies of foliage for the protection of the ferns from the scorching heat of the summer sun, whilst the trees and shrubs have been pruned of the lower branches in order to admit a free circulation of air and light.

LAKE.

The Lake having become almost dry during the extreme heat of summer and autumn, advantage was taken of a rise in the river to have the sluice-gates opened, and the lake refilled with fresh water.

Several broods of young ducks (a cross between the English mallard and the Japanese black duck) have been hatched; but the water rats are so numerous and voracious that great numbers are destroyed by them as soon as they make their appearance on the water. Besides the raids made by the rats, I am sorry to say that several of our most beautiful birds have been either shot or stolen. A pair of the black swans have succeeded in rearing a brood of cygnets. The goldfish annually spawn in the lake, and great numbers of young fish are hatched, but the cormorants devour them in incredible quantities. A number of English perch have been placed in the deeper and more secluded places, but I fear these share the same fate as the carp. It is not uncommon to find upwards of two dozen fish in the stomach of a bird when shot. Several raids have been made upon these pests, but although great numbers were destroyed, fresh flocks take the place of the defunct. The numerous exotic aquatic plants which have been placed in the lake from time to time, such as the Nile Paper Plant (*Papyrus Antiquorum*, or *Cyperus Papyrus*), *Nymphaea Alba*, English Water Lily, &c., have become thoroughly acclimatised, whilst the countless numbers of the Nile Trumpet Lily (*Richardia Aethiopica*), which fringe the margin of the water, show very beautifully when in flower. The trees and shrubs planted on the islands and on the banks of the Lake have grown with great celerity, and add considerably to the picturesqueness of the sheet of water.

Group of Colored Foliage Plants.

The collection of plants with colored and variegated foliage, which is contained in the triangular bed at the head of the Fern Gully, has succeeded well, and has presented throughout the seasons a bright and cheerful appearance. Several new and rare kinds have been added. The effect of variegated or colored foliage against a dark-green background is always pleasing, and it often compensates for the absence of flowers during seasons of drought.

LAWNS.

Palm House Lawn.

The Palm House Lawn, except where the ground is of a very poor nature, has been well maintained during the year. The bare places have been planted with couch grass, and have also been top-dressed with well decomposed manure.

The Classified Groups, and those set apart for representative plants of Queensland, continue to improve in appearance as the plants become established. Several new species have been added to the order *Amaryllidaceae*. The bed containing this order has been considerably enlarged. The two species of "Spear Lily"—*Doryanthes Palmeri*, and *D. Excelsa*—both natives of Queensland and northern New South Wales, have flowered and produced seeds during the year. The bed surrounding the band-house has been planted with a mixture of variegated leafage consisting of *Abutilons*, *Veronicas*, and *Chilian Beet*, which contrast effectively with the turf. The large bed near the old Palm House, which formerly contained a number of *Cordylines* and *Phormiums*, having, for the want of a better site, been set apart for the display of *Tulips*,

Hyacinths, and **Petunias**, a fair show of these gorgeous and attractive flowers has been maintained, and when in bloom has added considerably to the attractiveness of this portion of the grounds. The flowerbeds above the band-house have been regularly manured, dug over, and the plants re-arranged. A plantation, consisting of large trees and shrubs of the genera *Pinus*, *Araucaria*, *Acacia*, *Cordyline*, *Wigandia*, &c., has been formed on the south-east extremity of this lawn, for the purpose of shutting out the view of the gravel pit, which presented an unsightly appearance when viewed from the western portion of the Gardens. Numbers of *Cryptomeria elegans*, which is much admired for its feathery purple-tinted foliage, and *Eucalyptus ficifolia* (the scarlet-flowering Gum from Broke's Inlet, Western Australia), have been planted in conspicuous places.

Buffalo Grass Lawn.

The Buffalo Grass or Tropical Lawn has been greatly benefited by the top-dressings which have been applied from time to time. The shrubberies disposed over its surface are thriving, and some idea can now be gathered of the effects which will be produced in the course of a few years, by the grouping of Palms, Cycads, Cordylines, Aralias, and plants of a kindred nature, all of which were planted with the idea of creating tropical or sub-tropical scenery. Clumps of *Iresine* (blood-leaf), and other lively colored foliage plants, have been placed in such suitable positions as to impart a coloring to the landscape. Several of the beds have been enlarged, and many of the shrubs transplanted. This was found necessary on account of the vigorous growth of the plants, causing them to begin to overcrowd each other. Advantage was taken of the lake being dry, to have a quantity of swamp mould wheeled on to the lower portion of this lawn, and to thereby make the curves of the bank more picturesque. An improvement has also been effected by turfing with Buffalo grass the opposite margin from the rockery to the rustic bridge, which prevents the banks from wearing away by the action of storm water.

Western Lawn.

This sward is now quite equal to the Buffalo and Palm House Lawns, although much difficulty was at first experienced in getting the grass to grow satisfactorily, on account of the poor character of the soil, which in some places is nothing but pure sand. So deep is this sand-drift, that in some places it was found necessary to form an artificial bottom for the agricultural drains by puddling with clay at a depth of four feet before the draining material could be laid down. Repeated top-dressings of well-rotted stable manure, ashes, bone dust, &c., have overcome the difficulty at first experienced, and have resulted in the establishment of a thick and permanent sward. The classified groups of plants arranged in this locality, all of which have succeeded well, have been considerably augmented by the addition of fresh genera and species, especially the orders *Epacridæ*, *Thymelææ*, and *Proteacææ*; also the group of dwarf Australian shrubs, which has been enriched with several of our beautiful indigenous plants that from time to time have been collected and brought from the bush. A tabulated list of the orders now grouped on the various lawns will be found at the end of this Report.

For the purpose of making the aspect of the Western Lawn more effective, several umbrageous trees, such as oaks, &c., have been planted in suitable positions. These have thriven very well, and amply repay the time and labor which has been expended in transplanting them.

Several dwarf palms of the genus "*Chamærops*," and some *Phoenix* or "*Date Palm*," have been dotted over this lawn in conspicuous places.

New Central Lawn.

Like the preceding lawn, considerable difficulty has been experienced in getting the grass thoroughly established, owing to the stiff nature of the soil, which in this portion of the ground is volcanic and very shallow. In some places the trap-rock is met with at a depth of six inches, and owing to the steepness of the slope to the lake, much of the irrigating water which would otherwise soak through the ground, runs over the surface to little purpose. There are many bare places in this lawn which I intend having top-dressed during the ensuing year, and by this means and the increased water supply which I hope to obtain, I have no doubt that by next summer the turf will be all that can be desired.

The clumps of ornamental trees and shrubs, such as *Araucarias*, *Pittosporums*, *Cordylines*, variegated *Coprosmas* and *Euonymus*, *Cotoneasters*, *Thryptomenes*, *Ceanothus*, &c., &c., which were planted some time ago, as also the classified groups *Myrtacææ*, *Leguminosææ*, *Caprifoliacææ*, and *Liliacææ*, continue to improve in growth and appearance. With a view to

improving the mixed plantation round the tool-house, large numbers of deciduous plants, such as Rhus, Acers, Oaks, and others possessing autumnal tinted foliage, have been interspersed amongst the more sombre plants, the effect being in some respects, it must be admitted, very pleasing to the eye.

The whole of the Lawns, now about thirty-five acres in extent, have been kept in order by one of Shankes' 30-inch mowing machines, worked by a man and horse.

PALMETUM.

The Palmetum has been well managed and thoroughly dug over periodically. Many of the species which were heretofore considered of too tender a nature to succeed out of doors have, up to the present, thriven well, those especially worthy of note in this respect being *Cocos plumosa* (the plume palm), *Caryota urens* (the jaggery palm), *Elaeis melanococca*, and *E. guineensis* (African oil palm), *Livistona borbonica*, *L. rotundifolia*, and several species of *Sabal* and *Ptychosperma*. Amongst the hardy palms, *Brahea filamentosa* (the thread fan palm) is specially worthy of note, as it is likely to become one of the finest of the palm family for out-door culture in this colony.

The Cycads, which were formerly planted indiscriminately amongst the palms, have been formed into a separate group in the centre of a small lawn, which is surrounded by the palmetum. Many new genera and species have been added to both the orders *Palmæ* and *Cycadæ*, amongst which may be mentioned a new species of *Enecephalartos*, or Caffre bread tree, received from Mr. E. Tidmarsh, of the Grahamstown (S. Africa) Botanic Garden.

OLD CLASS GROUND.

The beds in the old class ground have had ample attention bestowed upon them, in the way of digging, re-labelling the plants, &c., but the trees are much overcrowded and require transplanting.

A number of genera and species unrepresented in the systematic beds on the lawns have been carefully labelled and planted in their respective classes temporarily, until the projected extension of the orders to which they belong has been accomplished in the improved portion of the grounds.

RAISED EMBANKMENT, YARRA WALK.

The *Tacsonias*, *Dolichos*, and other climbers, which were planted alongside the iron fence on the raised embankment fronting the river, so as to clothe the *Eucalyptus* trees, and thus form a screen of evergreens, have made considerable progress, and answer well the purpose for which they were intended. The walk has been newly gravelled, and kept clean and tidy, as it is a favourite promenade. On that portion of the bank which slopes towards the lake additional trees and shrubs have been planted with good effect.

ENCLOSURE NEAR DIRECTOR'S RESIDENCE.

On account of the vigorous growth of the plants in this enclosure it has been found necessary to enlarge some of the shrubberies. Several new azaleas have been added to the collection. From the constant theft of plants and flowers which take place throughout the Gardens, it has become imperative to continue the practice of having most of the choicest flowering shrubs, &c., planted in this enclosure until they have been propagated. It is no rare occurrence to find the *Ericas*, *Daphnes*, *Camellias*, &c., which are planted in the outside grounds, denuded of flowers, and the plants in some instances either completely destroyed, or dragged up by the roots and carried away. Many of the rarer plants, which were placed here for protection some three or four years ago, have been propagated from layers and cuttings, and have been distributed through the Gardens generally.

NEW WORKS.

Allusion having been made by me in previous reports to the projected formation of a Medicinal Garden, I am happy to say that, notwithstanding the scarcity of labor, I have at length succeeded in commencing that work. A piece of ground has been laid out for the purpose, and planted with all the hardy plants of reputed medical value at my disposal, *a detailed list of which will be found appended*. Tablets bearing the scientific and common names, natural orders, and habitats, have been placed to each plant. Since this little plantation has been established, it has, I have reason to believe, proved both interesting and instructive to many persons, and cannot fail to continue to be so as the collection is added to from time to time. It is also valuable as a depot for the supply of herbs for various purposes

to hospitals, &c., as the demand for the same is annually increasing. Strange to say, some of the commonest British herbs and roots are unobtainable in the Australian colonies when wanted for medicinal purposes. I have, however, written to Europe and America for seeds and plants of such as will be likely to prove of service. It is my ultimate intention, should available funds be placed at my disposal, to have a small octagonal glass house erected in the medical garden for the purpose of displaying to students, and others interested, those exotic plants which are of too tender a nature to grow in the open ground, such as *Cephaelis* (ipecacuanha), *Siphonia elastica* (indian-rubber or caoutchouc tree), *Strychnos nux vomica* (strychnine tree), *Cinchona* (Peruvian bark), *Ægle marmelos* (Bengal quinee), *Quassia amara* (quassia bark tree), *Piper eubeba* (cubebs), *Piper nigrum* (black pepper), *Croton Eleuteria* (casearilla bark), *Myroxylon Toluifera* (balsam of Tolu), *Butea frondosa* (Bengal kino), *Cassia fistula*, *Amomum Cardamomum* (round or eluster cardamom), *Zingiber officinale* (ginger), *Caryophyllus aromaticus* (clove tree), *Tamarindus indicus* (tamarind), and a host of others equally interesting and valuable, but which at the present time are crowded amongst other plants of a miscellaneous character.

Approach to Bridge over Yarra.

The raised walk leading from the Gardens to the bridge over the Yarra river has undergone a complete change. The unsightly Wattles and Buddleias, which grew in wild confusion along the Anderson street fence, have been cleared away, thus opening up a pretty view of Richmond and the river, which was altogether unattainable previously. The sides of the raised approach have been rebuilt and dressed off at a gentle slope to the boundary fence on the one hand, and the margin of the lake on the other. To effect this alteration, 1,800 loads of filling-up material, composed of clay and loam, had to be carted and spread, after which an avenue of *Populus alba* (white or silver poplar) was planted. A very heavy and necessary piece of work, in connection with the foregoing, was the raising of the iron fence, which was buried for several hundred yards in length and to a considerable depth, by the Melbourne City Corporation, when forming a footpath some time ago, at the lower end of Anderson street.

The walk on the top of the bank, 190 yards in length, which was not properly made at first, has been reformed, levelled off, and 70 cubic yards of gravel spread over its surface. This not only improves its appearance, but also renders it much more comfortable to pedestrians to walk upon. Buffalo grass has been laid on each side of the walk so as to form a pleasing margin, and to help to consolidate the embankment.

Walk at Foot of Experimental Bank.

The old footpath, which skirted the experimental bank from the rustic bridge near the buffalo grass lawn to the Yarra bank entrance, at the north-western extremity of the lake, has been remodelled, and is now eight feet in width. In its formation more than 300 loads of ballasting was expended, after which 50 loads of gravel was spread over its surface. Simultaneously with this work the approaches to the new rustic bridge, which connects this walk with the Yarra embankment, were also gravelled, and a number of suitable trees and shrubs planted on each side.

GENERAL REMARKS.

The borders generally, including the old portion of the Gardens, have received every possible attention, and a good display of flowers has been maintained throughout the year. The pruning of roses and other shrubs, trimming of edgings, mulching, tying and staking plants, raking, rolling, and cleaning of walks, watering, irrigating, digging, sowing of seeds, planting, transplanting, &c., has been satisfactorily performed; besides which, gravel has been excavated and carted as required for the repair and formation of walks. Pegs and stakes have been also made during wet weather, for bulbs and other plants; extensive compost heaps have been formed and regularly turned over to ensure decomposition; and a large amount of other incidental work has been accomplished. During the months of November and December, as a rule, strong winds prevail, often causing considerable damage to plants, and entailing much labor in retying and staking them. During the prevalence of heavy rains, more especially in severe thunder storms, great damage is caused to many of the walks, owing to the hilly nature of the grounds. The frequency of the damage to walks from the causes indicated is always a severe tax on the labor of the establishment, as a great deal of time is absorbed in getting the gravel, which has been washed off the walks, out of the lake and other places where it has been swept by the force of the storm water.

PROPAGATING DIVISIONS, CONSERVATORIES, ETC.

The whole of the large stock of plants, both under glass and in the tea-tree sheds, frames, &c., has been regularly overhauled and repotted. Most of the old and overgrown stock has now been removed to the borders, Fern Gully, and Government House grounds, and the vacancies have been filled up with vigorous young plants of special merit.

As mentioned in my Progress Report for last year, strict attention is being paid to the raising and introduction of plants of an utilitarian character for the purpose of distribution, with the view of the fostering of new industries. The Olive, Arrowroot, Castor Oil, Prickly Comfrey, American Sheep Bush, Grasses, &c., &c., have been grown and distributed in considerable quantities to settlers, they in return furnishing indigenous plants and seeds by way of exchange. The genus *Eucalyptus* is still largely propagated, and there are at least fifty species in the Garden.

The stove foliage plants have had special attention bestowed upon them, and I venture to say will now bear favorable comparison with any collection in the Southern Hemisphere, as the displays at the Horticultural Society's Exhibitions will amply testify. This section has also been considerably augmented by donations from Botanic Gardens, Nurserymen, and private sources. A good stock of well-grown plants is constantly being reared in the nurseries for the furnishing and decoration of the new Conservatory, consisting chiefly of *Codiaeums* (*Crotons*), *Cordylines*, *Marantas*, *Dieffenbachias*, *Cyanophyllums*, *Begonias*, *Alocasias*, *Palms*, &c., &c. Strict attention has also been paid to the putting in of cuttings of such plants as are scarce in the Gardens, and also those worthy of special merit. This particularly applies to those which have been transplanted into the classified groups, and other portions of the grounds. The Orchids, of which there is a good collection, but no proper accommodation for growing them, have been thoroughly cleaned, repotted, and tied on fresh blocks. Several handsome species have flowered during the year. The display of *Begonias*, *Gloxineas*, *Gesneras*, *Achimenes*, and *Caladiums*, during their respective seasons, has been exceptionally good. Great numbers of ferns have been raised from spores, several very rare species being amongst the number.

Whilst prominent attention has been given to the multiplication of useful plants, and plants for the conservatories, care has been taken that a large stock of hardy ornamental trees and shrubs are always on hand, both in the brush sheds and in the out-door nursery in the Domain. Thousands of *Roses*, *Coniferae*, *Oaks*, *Corynocarpus*, *Azaleas*, *Ericas*, *Magnolias*, *Aralias*, *Coprosmas*, *Cordylines*, *Weigelas*, *Epaeris*, *Prostantheras*, *Eugenias*, *Euonymus*, *Viburnums*, *Lasiandras*, *Wigandias*, &c., &c., have been grown for the general decoration of the Gardens, Domain, and Government House grounds, and for purposes of interchange; this being the only mode left me, to any extent, of adding to the collection, on account of the reduction of the annual vote.

For years past I have been unable to purchase any of the magnificent foliage plants which have been introduced into Europe by enterprising nurserymen and others. A small sum (£60) was voted for the purchase of plants last year, which enabled me to make a few selections from local nurserymen, and I hope to have this sum increased when the next Estimates are under consideration. The interchange of plants and seeds with all civilized countries as mentioned in my last Report has not at all flagged during the past year.

The boiler which heats the chief propagating department having become worn out, a new one was fitted in its place, and several new pipes were laid down for the better heating of the houses, as the old ones were completely rusted through. Since this has been done a maximum of heat, at a minimum of fuel, has been gained. A great portion of the labor in the nurseries is taken up in the receipt and despatch of plants, a constant interchange being kept up with various Botanic Gardens, nurserymen, and private individuals.

The contributors of new and rare plants, specially worthy of notice during the past three years, are Captain Braithwaite, of the Missionary ship *Dayspring*; Captain Broomfield, Messrs. Cattlett, McHardy, and Shepherd and Co., Sydney; the Directors of the Botanic Gardens of Sydney, Adelaide, Brisbane, Hobart, Kew, Saharanpur, and Java; Mr. Gudemann, of the Treasury, Melbourne (through Sir J. Hooker); Messrs. Hennings and Thurston, of Fiji; our local nurserymen and seedsmen—Messrs. W. Adamson and Co., J. Harris, G. Brunning and Son, Taylor and Sangster; Law, Somner, and Co.; T. Lang, James Smith and Sons, and Scott and Sons. To these and others I am greatly indebted for the receipt of plants in exchange for others from the Gardens nurseries.

Victoria House.

The tank containing the *Victoria Regia* has been cleaned out, fresh soil added, and a vigorous young plant substituted for the old one. During the flowering season the *Victoria*

Regia is a great attraction for thousands of visitors, and I trust ere long to be able to report that better accommodation has been provided for this noble aquatic. The present tank is altogether unsuitable, and is very defective on account of leakage.

New Conservatory.

A good display of foliage and flowering plants has been maintained in the New Conservatory during the year. Some of the larger plants, as Palms, Pandanus, Hibiscus, Musas, Acalyphas, &c., have made considerable growth. Most of the plants have been repotted, but they are altogether too crowded to be seen to advantage. The outside of the building has been repainted, the Public Works Department defraying the expenses incurred in this respect.

Old Palm House.

Mention was made in my last report of the old palm house having been converted into a fernery and economic plant house. I have much pleasure in stating that the ferns and other plants have succeeded fairly well, considering the way in which they are crowded together.

Succulent House.

The old fernery having been converted into a succulent house, all the available Cacti, Aloes, Euphorbias, Rhipsalis, Echeverias, &c., &c., have been placed here, and, having been judiciously looked after by the caretaker, have made considerable progress.

WATER SUPPLY, BLACKSMITHS' AND CARPENTERS' WORK.

The mains, with the reticular pipes, laid down throughout the grounds for water supply, are now several miles in length, and are still in course of extension. All of the plumbing work in connection with the water supply, as well as the ordinary blacksmiths' work, painting, label writing, glazing, and carpentering, is performed by the regular staff, the services of those engaged in the above being also available in cases of emergency for performing outdoor work, such as watering, hoeing, &c.

SCIENTIFIC, OFFICIAL, AND OTHER WORK.

Besides much correspondence, the keeping of accounts, with regard to the expenditure of Parliamentary votes, as well as various records *re* interchanges of plants, and imparting information required concerning cultivation, &c., I may add the following also as subjects of great importance :—

Seed Room and Herbarium.

The herbarium specimens, numbering 6,000 (1,090 of which are ferns alone), have been carefully turned over, labelled, cleaned, and partly reclassified according to Hooker and Bentham's "*Genera Plantarum*." Several very large collections of dried specimens have been received from various scientific institutions and private individuals, and exchanges of a similar nature made. Native plants and herbarium specimens, many of them new to our collection, have been obtained at Brighton, Cheltenham, Frankston, Dandenong, Gippsland, and other places, and added to the several orders to which they belong. Lists of the genera and species contained in the classified groups have been compiled, also of such plants in the Garden as are available for the formation of new groups. An account of all new plants introduced into the Gardens is kept posted, for the purpose of being appended to the general catalogue, which is now nearly completed, the whole of the M.S. being in the hands of the Government Printer. Several collections of dried plants have been prepared and distributed amongst the foreign commissioners of the late International Exhibition, they, in return, undertaking to forward specimens of natural history, &c., for my projected Museum of Economic Botany.

Besides the foregoing items of work performed in the seed room and herbarium, seeds have been gathered, cleaned, and stored, labelled and handed over for propagation and distribution; and specimens for lectures, educational purposes, painting, and modelling, have been supplied from time to time.

Labelling Division.

The system of labelling, alluded to in my last report, is still being carried out, as far as practicable. Some three years ago I selected one of the permanent staff to specially attend to the labelling of the plants throughout the Garden, the former practice of allowing several of the

employés to perform the work having proved both inconvenient and annoying. The new system has worked well, and is a marked improvement on the old, the labels being uniform throughout, and may now be read by anyone. Much inconvenience is frequently occasioned by persons displacing the tallies, and therefore apparent mistakes in nomenclature have to be rectified almost daily.

The scarcity of labor during the busy seasons has compelled me to call the services of the carpenter, seedsman, and label-writer into requisition for the purpose of assisting in outdoor work in the gardens.

Laboratory.

The collection of vegetable extracts and preparations are being added to occasionally, although no extensive laboratory work has been attempted since the late International Exhibition. It is very gratifying to have to report that, notwithstanding the crude means at my disposal for the preparation of exhibits of economic value, at every industrial exhibition which has taken place, both local, intercolonial, and foreign, since the year 1876, my efforts to have the resources of the colony worthily represented have been so successful, that diplomas, medals, and certificates of merit have been awarded in each instance.

Except to those more intimately acquainted with the internal working of my Department, a very imperfect idea can be formed of the vast amount of labour entailed in the getting up of these exhibits, the preparation of manuscript for labels, correspondence on various subjects, such as affording information *re* the culture, nomenclature, and cultivation of plants, &c. As an instance, it may be mentioned that the descriptive lists of the exhibits forwarded to the Paris Exhibition alone occupied no less than thirty-eight pages of the official catalogue, published by authority of the Royal Commissioners for Victoria, whilst the collection sent to the late Melbourne Exhibition (supposed to be the largest of the kind ever shown in the colony) was deemed worthy of being catalogued in pamphlet form by the Commissioners for distribution.

ACCLIMATISATION AND DISTRIBUTION OF USEFUL PLANTS.

Several plants of economic value, such as *Aleurites moluccana* (Otaheite walnut), *Mikania Guaco*, the "Guaco" of South America, a composite plant, said to possess the property of curing snakebite, several of the banana tribe, *Cinnamomum Zeylanicum* (the cinnamon tree), and others which were planted out on the experimental ground some time ago for test purposes, have done fairly well. Special attention is directed to the fact, that the cinnamon tree planted in the Laurineæ group has grown with greater luxuriance than those under glass, thus affording an illustration of what may be accomplished by selecting a suitable soil and situation. I may also add, as stated in my report for 1880, that "Strict attention has been paid to the raising and introduction of plants of a utilitarian nature for the purpose of distribution, with the view to establishing and fostering new industries throughout the colony. The olive, castor-oil, tea plant, cinchona, fodder plants of various kinds, as grasses and herbs, and arrowroot, &c., have been raised in considerable quantities. Plants and seeds of these have been largely distributed to applicants, principally settlers, they in return furnishing indigenous ferns, shrubs, seeds, &c., by way of exchange."

THINGS URGENTLY REQUIRED FOR THE PURPOSE OF MAKING THE GARDEN MORE ATTRACTIVE AND POPULAR.

A new house for the Victoria regia is very urgently required. For the sake of economy I would suggest that another section of the large conservatory should be erected for the accommodation of this noble plant, as the boiler which is attached to the portion already built is capable of heating a very extensive area of glass. A sum should also be placed on the Estimates sufficient to cover the expenses consequent upon the removal and concentration of all the smaller glass houses, the advantages of which I have already explained in my previous Report. The amount of glass at present in the Gardens is totally inadequate for the display of plants, not to speak of their cultivation. I have no means of growing Fuchsias, Pelargoniums, Primulas, Cinerarias, Calceolarias, and other beautiful flowering plants, which are so universally admired for their wealth of bloom. For this purpose at least a couple of cheap greenhouses should be erected, the cost of which would be altogether trifling in comparison with the results which would be obtained in point of floral display. In the Adelaide Botanic Gardens there are no fewer than seventeen glass houses (including a large palm house), exclusive of glass frames, and consequently there is an abundance of flowers at

all seasons of the year, whilst we are obliged to depend almost exclusively upon foliage plants for conservatory decoration, except during the summer, when the gesneraceous plants are in bloom. Were better accommodation provided, much of the labour, which is now lost in the constant shifting of plants to make room for the new botanical specimens which are constantly arriving from various countries, could be profitably employed at other necessary work.

A museum of economic botany is also a desideratum urgently needed for the instruction of the public. It need not be a very elaborate building. Rustic work, with thatched roof, would be quite good enough, and, like the summer-houses in the Garden, it could be made picturesque. I have already sufficient material stowed away in boxes which, if tastefully displayed, would not fail to meet with general approval.

A properly laid out experimental garden is one of the chief wants of the Department at present. A commencement was made in this direction some two years ago, but it had to be abandoned by reason of the reduction of the staff. The same remarks apply to the rosery, which I have contemplated forming for years past, but the present labor is barely sufficient to keep the grounds in order.

GOVERNMENT HOUSE GROUNDS AND DOMAIN.

GOVERNMENT HOUSE GROUNDS.

The flower garden, fern gully and rockery, shrubberies, and groups of plants dotted over the large lawn in front of the mansion, have had every care. Unremitting attention in watering was requisite during the dry season, the supply of water sometimes being very inadequate; but notwithstanding the drawback experienced in this respect, the grounds maintained a very satisfactory appearance throughout the year. A large number of plants (over 700), of a miscellaneous character, as *Pinus*, *Eucalypti*, *Araucarias*, *Roses*, *Pelargoniums*, *Iresines*, besides more than 600 *Fuchsias*—a donation from Messrs. Brunning and Son, St. Kilda nurseries—have been distributed about the grounds for decorative purposes. The numerous plantations of herbaceous flowering plants and shrubs which have been formed during the past three years, now supply ample blooms for the indoor floral decoration of Government House. Large clumps of *Gazanias*, *Mesembryanthemums*, and *Scarlet Pelargoniums*, have been planted in conspicuous places on the trenched borders which margin the carriage stand, so as to relieve the sombre appearance presented by the thick plantations of pines and cypress in this locality. When in bloom the contrast of the bright-colored flowers against the dark-green background is very striking and effective.

Four hundred yards of edging, composed of Buffalo grass, in addition to what is already established, has been laid down during the past year. In addition, the lifting and planting, watering, tying and staking trees and shrubs, spreading of soils, manure, &c., sowing seeds, hoeing, digging, pruning, mowing, attending to pot plants, clipping hedges, weeding water channels, walks, &c., and other necessary routine work, has fully occupied the staff of men employed in this reserve. With few exceptions all the trees and shrubs which have been planted have done well. The average growth of those planted in 1875 is from 6 to 13 feet in height.

DOMAIN.

A number of dead wattles, blue gums, and willows, which were very unsightly, have been cut down, and the timber utilized for fuel for the small engine, &c.

The plantations of *Eucalyptus*, alluded to in my last report as having been made, have done well, some of the species having grown with remarkable rapidity. Notwithstanding all the care and vigilance which is exercised, vandalism is still rampant. The senseless practice of thoughtless or vicious persons mutilating young trees, especially those which are in vigorous growth, is of frequent occurrence. The excessive drought which has prevailed, entailed the necessity of a large amount of watering being done by the aid of water carts, as well as by manual labor, thereby occupying most of the time of the available staff during this trying period. A hedge composed of the African Boxthorn (*Lyceum horridum*), has been planted around the Observatory fence; and upwards of 250 trees, consisting of *Populus*, *Araucaria*, and

Pinus, have been planted in various parts of the domain. Although a considerable amount of labor and trouble was expended in the laying out and forming of the new gravelled walks through the domain, for the convenience of pedestrians to and from Melbourne, a portion of those for whose benefit these footpaths have been made, persist in making fresh tracks for themselves through the grass, thus causing much annoyance and a useless waste of time in trying to stop it. The dust from the St. Kilda road having accumulated to a considerable depth alongside the picket fence enclosing the domain, and evidence of the decay of the timber having become apparent therefrom, the accumulation of debris has been removed along the whole frontage of the St. Kilda road. Besides the foregoing items of work, the eradication of noxious weeds, thinning out of young wattles where they interfered with exotic plants, pruning the lower branches of trees so as to prevent damage by fire, carting of soils, stones, gravel, &c., lifting and relaying pipes, transplanting trees and shrubs, assisting in new works in the Gardens, and other incidental work, has fully occupied the staff of men allotted to the Domain. In conclusion I beg to state that the numerous trees and shrubs which have been planted in the Domain add materially to its appearance; and taking into account the reduction of the staff, and the amount of work which has been got through in Government House Grounds and the Botanic Gardens, this portion of the grounds is in fair order, seeing that it has never been drained nor trenched.

I have the honor to be, Sir,

Your obedient servant,

WILLIAM R. GUILFOYLE,
Director.

NATURAL ORDERS REPRESENTED IN GARDENS UNDER NEW SYSTEM OF ARRANGEMENT.

GROUPED ON WESTERN LAWN.		
Ranunculaceæ	Thymeleæ	Capparidææ
Magnoliaceæ	Laurineæ	Hydrophyllaceæ
Rosaceæ	Polygaleæ	Polemoniaceæ
Cupuliferæ	Anonaceæ	Cistiueæ
Urticæ	Ternstroemiaceæ	Epacridææ
Pittosporææ	Saxifrageæ	Eriaceææ
Proteaceæ	Solanææ	Berberidaecææ
ON BUFFALO GRASS LAWN.		
Rutaceæ		Zygophylleæ
CENTRAL LAWN AND VICINITY.		
Leguminosæ	Cycadeæ	Liliaceæ
Lythariææ	Myrtaceæ	Palmeæ
Irideæ	Caprifoliaceæ	
PALM HOUSE LAWN AND VICINITY.		
Melastomaceæ	Jasminææ	Bignoniaceæ
Myoporiueæ	Amaryllidææ	Verbenaceæ
Scrophularinææ	Acanthaceæ	
ADJACENT TO PROPAGATING DEPARTMENT.		
Anacardiaceæ.		
ADJACENT TO EXPERIMENTAL BANK.		
Coniferaæ.		

Total—41 Natural Orders.

MEDICINAL PLANTS AND HERBS IN NEW MEDICAL GARDEN.

Botanical Name.	Common Name.	Botanical Name.	Common Name.
<i>Artemisia Abrotanum</i>	Southern-wood	<i>Centranthus ruber</i>	Red valerian
" <i>Absinthium</i>	Common wormwood	<i>Draecena draco</i>	Dragou's blood tree
<i>Anethum Fœniculum</i>	The fennel	<i>Daucus gummifera</i>	Gum-producing carrot
<i>Atropa belladonna</i>	Deadly nightshade	<i>Digitalis purpurea</i>	Foxglove
<i>Anthemis nobilis</i>	Common chamomile	<i>Dipsacus sylvestris</i>	Wood teal
" <i>fuscata</i>	Brown sealed chamomile	<i>Datura stramonium</i>	Thoru apple
" <i>tinctoria</i>	Dye chamomile	<i>Delphinium Staphisagria</i>	Stavesacre
<i>Anethum graveolens</i>	The dill	<i>Erodium cicutarium</i>	Hemlock-leaved heron's bill
<i>Anchusa tinctoria</i>	Alkanet root	<i>Ferula assafœtida</i>	Gum assafœtida
<i>Achillea millefolium</i>	Common milfoil, or yarrow	<i>Gelsemium sempervirens</i>	Carolina wild woodbine, or jasmine
" <i>lanata</i>	Woolly milfoil	<i>Glycyrrhiza glabra</i>	Liquorice root
<i>Ammi Visnaga</i>	Visnaga, or Tooth-pick	<i>Geum urbauum</i>	Common avens
<i>Allium sativum</i>	Garlic [Bishop-weed]	<i>Galium verum</i>	Bedstraw
" <i>Cepa</i>	The onion	" <i>aparine</i>	Cleavers
" <i>porrum</i>	The leek	<i>Hypericum perforatum</i>	St. John's wort
<i>Apium graveolens</i>	Celery	<i>Hyssopus officinalis</i>	Common Hyssop
<i>Asparagus officinalis</i>	Asparagus	<i>Helleborus niger</i>	Black hellebore, or Christ-mas rose
<i>Aretium lappa</i>	Burdock	" <i>lividus</i>	Pale hellebore
<i>Anemone sylvestris</i>	Wood snowdrop	" <i>fetidus</i>	Fœtid bear's foot
<i>Arum italicum</i>	Italian wake-robin	<i>Humulus Lupulus</i>	Common hop
<i>Anthyllis vulneraria</i>	Common wound wort	<i>Ilyoscyamus aureus</i>	Golden henbane
<i>Agrimonia Eupatoria</i>	Common agrimony	<i>Iris florentina</i>	Orris root
<i>Althæa officinalis</i>	Marsh mallow	<i>Inula Helenium</i>	Elecampane
<i>Betonica officinalis</i>	Betony	<i>Lithospermum officinale</i>	Gromwell
<i>Borago officinalis</i>	Borage	<i>Laserpitium gummiiferum</i>	Gum-producing laserwort
<i>Brassica (Synapis) alba</i>	Mustard	<i>Lavandula spica</i>	French lavender
<i>Bryonia dioica</i>	Dioecious bryony	<i>Linum usitatissimum</i>	Common flax
<i>Baptisia tinctoria</i>	Wild indigo	<i>Leonotis Leonurus</i>	Lion's ear, or lion's tail
<i>Cotyledon orbiculata</i>	Corn-leaf	<i>Leonurus cardiaca</i>	Common motherwort
<i>Cnicus benedictus</i>	Blessed thistle	<i>Lilium tigrinum</i>	Tiger lily
<i>Carum Carui</i>	Caraway seed	<i>Lobelia inflata</i>	Indian tobacco
<i>Cichorium Intybus</i>	Wild chicory	" <i>syphilitica</i>	Blue cardinal
" <i>endivia</i>	Endive	<i>Lythrum salicaria</i>	Purple willow herb
<i>Charophyllum sativum</i>	Chervil	<i>Libanotis vulgaris</i>	Spikenel
<i>Carthamus tinctorius</i>	Safflower, or bastard saffron	<i>Melilotus officinalis</i>	King's clover
<i>Crocus sativus</i>	True saffron crocus	<i>Malva crispa</i>	Curled mallow
<i>Cistus ladaniferus</i>	Bog cistus, or gum ladanum	<i>Mentha piperita</i>	Peppermint
<i>Chelidonium majus</i>	Gardencelandine	" <i>viridis</i>	Spearmint
<i>Cedronella triphylla</i>	Balm of Gilead	" <i>pulegium</i>	Pennyroyal
<i>Colchicum autumnale</i>	Meadow saffron	<i>Marrubium vulgare</i>	Horchound
<i>Coehlearia Armoracea</i>	Horse-radish	<i>Mikauia Guæco</i>	Guæco
<i>Cistus creticus</i>	Cretan gum cistus	<i>Nasturtium officinale</i>	Common nasturtium, or water-cress
<i>Calendula officinalis</i>	Common marigold	<i>Nicotiana Tabacum</i>	Tobacco plant
<i>Calamintha clinopodium</i>	Wild basil	<i>Nepeta cataria</i>	Catmint
<i>Cynoglossum officinale</i>	Common hound's tongue		
<i>Coriandrum sativum</i>	Coriander		
<i>Conium maculatum</i>	Hemlock		

MEDICINAL PLANTS AND HERBS IN NEW MEDICAL GARDEN—continued.

Botanical Name.	Common Name.	Botanical Name.	Common Name.
<i>Origanum Majoriana</i>	Sweet marjorum	<i>Salvia pratensis</i>	Meadow sage
" <i>vulgare</i>	Wild marjorum	" <i>verbenacea</i>	Wild clary
<i>Oenanthe peucedanifolia</i>	Sulphurwort	<i>Spiraea Ulmaria</i>	Meadow sweet
" <i>apiifolia</i>	Parsley-leaved dropwort	" <i>filipendula</i>	Common dropwort
<i>Pyrethrum Parthenium</i>	Feverfew	<i>Saponaria officinalis</i>	Soapwort
<i>Psoralea bituminosa</i>	Bitumen trefoil	<i>Solanum Dulcamara</i>	Bitter-sweet, or woody night-shade
<i>Polemonium reptans</i>	Greek valerian	<i>Solidago virgaurea</i>	Golden rod
<i>Papaver sonniferum</i>	Opium poppy	<i>Sempervivum tectorum</i>	Common house leek
" <i>Rheas</i>	Field or corn poppy	<i>Satureja hortensis</i>	Summer savory
" <i>orientale</i>	Turkish poppy	" <i>montana</i>	Winter savory
" <i>pilosum</i>	Hairy poppy	<i>Stachys sylvatica</i>	Common hedge nettle
<i>Pulsatilla vulgaris</i>	Common pulsatilla	<i>Symphytum aspernum</i>	Prickly comfrey
<i>Prunella vulgaris</i>	Common self-heal	" <i>orientale</i>	Turkish comfrey
<i>Polygonatum vulgare</i>	Solomon's seal	<i>Spartium scoparium</i>	English broom
<i>Parietaria officinalis</i>	Common pellitory	<i>Sedum reflexum</i>	Reflexed stonecrop
<i>Ruta graveolens</i>	Common rue	<i>Silene inflata</i>	Inflated catchfly
<i>Rumex acetosa</i>	Wood sorrel	<i>Teucrium scorodonia</i>	Wood sage
<i>Ranunculus bulbosus</i>	Bulbous rooted crowfoot	<i>Taraxacum officinalis</i>	Common dandelion
<i>Rheum palmatum</i>	Turkey rhubarb	<i>Trigonella fœnum-græcum</i>	Fenugreek
" <i>rhaponticum</i>	English rhubarb	<i>Teucrium marum</i>	Cat thyme
<i>Rosmarinus officinalis</i>	Rosemary	<i>Thalictrum flavum</i>	Yellow meadow rue
<i>Smilax Sarsaparilla</i>	Common sarsaparilla	<i>Thymus vulgaris</i>	Common thyme
" <i>China</i>	China sarsaparilla	<i>Tanacetum vulgare</i>	Common tansy
" <i>aspera</i>	Italian sarsaparilla	<i>Urginea Scilla</i>	Common squill
" <i>glycyphylla</i>	New South Wales sarsaparilla	<i>Verbena officinalis</i>	Common vervain
<i>Salvia officinalis</i>	Common sage		

DONORS OF PLANTS, SEEDS, ETC.

Adamson, W., and Co., Seedsmen, Melbourne— Seeds, bulbs, &c., in quantity.	Bull, Wm., Chelsea, England— Illustrated Catalogues of New Plants.
Adelaide Botanic Gardens (Dr. R. Schomburg, Director)— Wardian cases of plants, and large collections of seeds and samples of economic botany.	Cain, —, South Yarra— Large quantity of material for foundations of walks, &c.
Adelaide Steamship Company (Messrs. McMeckan, Blackwood, and Co., agents)— Free freight on consignments.	Cape Town (South Africa) Botanic Gardens (Professor P. MacOwan, Director)— Choice seeds.
Alecock, H. U., Melbourne— Valuable samples of timber, and two handsome garden seats.	Casey, Hon. J. J., M.P., St. Kilda— Quantity of native plants.
Alton, A., Echuca— Quantity of <i>Grevillea robusta</i> seeds.	Casey, N. J., Collins street west, Melbourne— Choice seeds.
Anderson, Mrs. Colonel, South Yarra— Choice cuttings and seeds.	Chirnside, Mrs., Werribee Park— Plants.
Ardlie, W., Warrnambool— Seeds.	Clarke, Rev. Wm., Williamstown— Choice seeds from Ceylon.
Australasian Steam Navigation Company (W. Siddeley and Co.)— Free freight on numerous consignments from Queensland and New South Wales.	Clarson, Wm., Melbourne— Valuable plants, and seeds in quantities.
Baird, Dr., Belfast— Plants.	Close, E. C., New South Wales— Seeds.
Ballarat Botanic Gardens (per W. Langley, Esq.)— Seeds.	Cocking, Mrs., Kew— Choice plants.
Bell, R. A., Stawell— Native seeds.	Codrington, Revd. J., New Caledonia— Plants from Norfolk Island.
Blackburn, Captain— Native seeds.	Cole, J., Richmond— Miscellaneous plants.
Blatchford, Mrs., Fiji— Plants from Fiji.	Collins, H. M., South Yarra— Seeds from India.
Boyce, H., Kew— Choice specimen plants.	Coutie, J., Melbourne— Tar canvas for packing purposes.
Braithwaite, Captain, New Hebrides Mission Ship <i>Day-spring</i> — Rare palms and croton cuttings.	Creswell, C. F., South Yarra— Numerous large and valuable specimen tree ferns, &c., also seeds.
Brayshay, D. W., Hamilton— Native plants.	Cudmore, Mrs.— Choice fern.
Brewer, R., New Zealand— Seeds.	Cunnack, G., Castlemaine— Valuable plants.
Brisbane (Queensland) Botanic Gardens (J. Pink, Esq., Director)— Valuable seeds in quantity.	Curdie, Dr., Camperdown— Seeds.
Brisbane, W., Beaconsfield— Quantity of native ferns.	Curl, Dr., S. M., New Zealand— New Zealand seeds.
Brown, J., Drouin— Samples of Victorian woods.	Currie, J., Melbourne— Quantity of large tree ferns.
Bruce, G. W., St. Kilda— Choice flower seeds from Enrope.	D'Alton, J.— Large collection of dried native plants of Victoria; also seeds.
Brunning, G., and Son, St. Kilda— Plants in quantity, seeds and bulbs.	Daly, W. J.— Empty wardian cases, and plants, and seeds, &c., in quantity, from New Caledonia.
Buck, E. C., of India— Valuable New Zealand ferns.	Dall, J., New Zealand— Seeds and plants.
Bnitenzorg (Java) Botanic Gardens (the late Dr. E. Scheffer; also present Director)— Large collections of palm seeds and valuable plants.	Dangar, W. J., New South Wales— Seeds.
	Davenport, Mrs., Adelaide— Seeds and plants.
	Dickson, R. W., South Yarra— Quantity of clay for embankment.

DONORS OF PLANTS, SEEDS, ETC.—continued.

- Dobson, His Honor Judge, Tasmania—
Valuable plants and seeds from Tasmania.
- Dombrain, E., and Sons, Melbourne—
Quantity of "Phenyle" disinfectant for plant houses, &c.
- Dunn, J., South Africa—
Valuable plants.
- Ellery, R. L. J., Melbourne—
Large specimen plant and native seeds.
- Exhibition Commissioners, Melbourne—
Quantity of large and valuable tree ferns, palms, &c.,
from Exhibition grounds.
- Floyd, Revd. Wm., Fiji—
Plants and cuttings.
- Ford, A. W., Northcote—
Quantity of seeds.
- French, C., South Yarra—
Miscellaneous plants, seeds, and specimens for herbarium.
- Fuller, R., Drouin—
Native ferns.
- Fyffe, Dr., Beechworth—
Seeds of native plants.
- Garland, J. G., West Melbourne—
Seeds.
- Gear, Mrs., South Yarra—
Plants.
- Gibbs, Bright, and Co., Melbourne—
Free freight per steamer on consignments.
- Goldstein, T. R. Y., Melbourne—
Choice ferns.
- Grace, P., Cooper's Creek, Queensland—
Select Seeds.
- Grahamstown Botanic Gardens, South Africa, E. Tidmarsh,
Esq.—
Valuable Palms, &c.
- Grant, A. N., Hillston, New South Wales—
Quantity of seeds.
- Graburn, W., Fiji—
Fijian plants, &c.
- Greig, W. J., Toorak—
Plants and seeds.
- Grimwood, Mrs., Murchison—
Plants.
- Guilfoyle, W. R.—
Collections of herbarium specimens, plants, seeds, &c.
- Hagenhauer, Revd. F. A., Gippsland—
Quantity of tubers of *canna edulis*.
- Hamilton, Police Serjeant, Warrnambool—
Seeds of native plants.
- Harding, J., New Zealand—
Quantity of New Zealand
- Harris, G., Colac—
Dried plants for herbarium.
- Harris, J., M.P., South Yarra—
Rare and select plants.
- Hatt, Mrs. A., Newbridge—
Seeds.
- Henderson, V. E., Collingwood—
Plants and seeds.
- Henty, Mrs. E., St. Kilda—
Cuttings of choice plants.
- Heyne, the late E. B., Adelaide—
Large quantities of valuable seeds.
- Hobart Town Botanic Gardens (F. Abbott, Esq., Director)—
Valuable select plants and seeds in quantities.
- Hodgkinson, J., Richmond River, New South Wales—
Quantity of valuable tree ferns, palms, seeds, &c.
- Hole, M., South Yarra—
Quantity of manure.
- Holtermann and Co., of Sydney—
Patent india-rubber hose-piping.
- Hong Kong Botanic Gardens (C. Ford, Esq., Director)—
Valuable seeds in quantities.
- Horticultural Society's Gardens, Richmond, per J. Neilson,
Curator—
Plants.
- Huber and Co., seed merchants, Hyères (Var), France.
Choice seeds.
- Hunt, J. W., Malvern—
Plants and seeds.
- Hutchinsou, M. L., Melbourne—
Plants.
- Hunter, J., South Melbourne—
Quantity of manure.
- Hutton, Colonel, Kew—
Plants and seeds.
- Hyde, S., Sandhurst—
Choice seeds.
- India, Commissioners for, International Exhibition,
Melbourne—
Collection of fruit models.
- Inglis, J., Melbourne—
Rare seeds.
- Ingram, A., Williamstown—
Choice bulbs.
- Innes, S. E., West Australia—
Seed of *Eucalyptus fleifolia*.
- Japan, Commissioners for, International Exhibition,
Melbourne—
Quantities of seeds and samples of woods.
- Jones, C., Richmond—
Specimen plants.
- Jones, W., Gippsland—
Native seeds.
- Keys, J., Brighton—
Seeds of native plants.
- Kinnear, Mrs., Toorak—
Choice and select bnls, seeds, &c.
- Lang, T., and Co., Melbourne—
Seeds.
- Laughton, T., Gippsland—
Seeds and specimen plant.
- Law, Somner, and Co., Melbourne—
Valuable plants.
- Le Coq and Co., A., Germany—
Selection of valuable seeds.
- Lefroy, His Excellency Sir J. H., K.C.M.G., late Governor
of Tasmania—
Rare and valuable seeds from East Indies.
- Lisbou (Portugal) National Museum (per Director)—
Large collection of choice seeds.
- Litchfield, W., Gippsland—
Native seeds.
- Loftie, R. C., Government Resident, Albury, West
Australia—
Rare seeds and palms.
- Lydiard, J.—
Seed of native plant.
- Mackinnon, W., Melbourne—
Seed of choice plant from South Africa.
- McPherson, A., Queensland—
Choice seeds.
- Mason, J., Belfast—
Seeds and plants.
- Miller, F. B., Kew—
Choice bulbs in quantities.
- Miller, G. G., Moyston—
Valuable seeds of native plants in quantities.
- Miller, Hon. H., M.L.C., Kew—
Large and valuable specimen plants.
- Milne, A., Ceylon—
Valuable seeds.
- Mohan, P. O., Adelaide—
Choice seeds.
- Moline, J., Prahran—
Choice plant.
- Moore, H. Byron, Melbourne—
Large quantity of tree ferns.
- Moran, H. J., Dandenong—
Valuable native plants, seeds, &c.
- McEwan, J., and Co., Melbourne—
Free freight on consignments to and from Fiji, *ex S.S.*
Suva.
- McLean, Dr., Williamstown—
New and rare plants and seeds.
- McLean, W., St. Kilda—
Choice bulbs.
- Natal Botanic Gardens (W. Keit, Esq., Director)—
Valuable seeds in quantities.
- Neate, A., Collingwood—
Seeds, orchid, &c., from New South Wales.
- Neate, A. C., Albert Park—
Plants and native seeds.
- Netherlands (India) Steam Navigation Company—
Free freight on numerous consignments from Singa-
pore, Batavia, &c.
- Neville, Mrs., Whittlesea—
Seeds of native plants.
- New Caledonia, Commissioners for, International Exhi-
bition, Melbourne—
Quantity of various seed samples for Botanic Museum.
- New Plymouth Botanic Gardens, New Zealand—
Quantity of New Zealand seeds.
- New South Wales, Commissioners for International Exhi-
bition, Melbourne—
Numerous large and valuable specimen plants.
- New Zealand, Commissioners for International Exhibition,
Melbourne.
Large and choice specimen plant of the Nikau palm
(*Areca sapida*).
- New Zealand Steamship Company, Messrs. McMeekan,
Blackwood, and Co., agents—
Free freight on consignments from New Zealand.
- Oliver, G., New Zealand—
Seeds and plants.

DONORS OF PLANTS, SEEDS, ETC.—*continued.*

- O'Shanassy, Sir J., K.C.M.G., Hawthorn—
Valuable seeds.
- Ould, Wm., Gippsland—
Large native tree ferns.
- Palmer, Mrs., Sale—
Native seeds, &c.
- Paxton, Mrs., South Yarra—
Large specimen plant.
- Peninsular and Oriental Steam Navigation Company (G. Withers, Esq.)—
Free freight on numerous consignments.
- Pluger, Mrs., Honolulu—
Choice seeds.
- Pickersgill, J., East Melbourne—
Plants.
- Piteher, F., Collingwood—
Ferns and other native plants, seeds, &c.
- Price, W., Hartwell—
Seeds of native plant.
- Police Department, Russell street Barracks, per Superintendent Winch—
Large and valuable specimen plants.
- Queensland, Commissioners for, International Exhibition, Melbourne—
Large quantities of valuable specimen palms, epiphytal ferns, &c., &c.
- Queensland, Government of (per Colonial Secretary)—
Quantity of seed.
- Ramsay, Hon. R., M.P., East Melbourne—
Valuable seeds and plants.
- Richardson, D., South Yarra—
Seeds.
- Richardson, W., South Yarra—
Cuttings of choice plants.
- Robinson, G. W., Berwick—
Choice specimens for herbarium.
- Robinson, Isaac, Norfolk Island—
Rare seeds.
- Rodda, Rev. E., Benalla—
Selection of Victorian ferns.
- Rose, R., Adelaide—
Choice seeds.
- Rough, Captain, New Zealand—
Seeds.
- Rowan, Captain C. F., Melbourne—
Valuable seeds from West Australia.
- Royal Botanic Gardens, Kew, London (Sir J. D. Hooker, Director)—
Choice seeds.
- Ryan, Chas., Macedon—
Rare plants and seeds.
- Saharanpur, India, Botanic Gardens (J. G. Duthie, Esq., Director)—
Three warden cases of valuable plants, also large collections of choice seeds.
- Sands, J., Sydney, New South Wales—
Valuable flower seeds.
- Schild, J. C., Footscray—
Native ferns.
- Scott, Dr., Perth, West Australia—
Choice seeds in quantities.
- Scott and Sons, J., Hawthoru—
Collection of dahlias.
- Seaton, J., New Zealand—
New and rare valuable plants from New Zealand.
- Shattoek, E., Flemington—
Begonia seed.
- Shaw, J., Camperdown—
Choice and valuable seeds.
- Siehlau, G. F., Geelong—
Rare and select seeds.
- Sims, J. G., Brighton—
Choice flower seeds.
- Singapore Botanic Gardens, Straits Settlement (W. Cantley, Esq.)—
Warden case of valuable plants.
- Skene, J. W., St. Kilda—
Plants.
- Smith, A. H., Greeta—
Choice seeds from Queensland.
- Smith, G., Malvern—
Hyacinth bulbs, ericas, &c.
- Smith, Hon. G. V., Jolimont—
Quantity of tree and other native ferns.
- Smith, J. B., Cobuna Plains—
Native seeds.
- Spence Brothers, Melbourne—
Free freight on consignments to and from Mauritius and South Africa, &c.
- Stafford, E., Richmond—
Seeds.
- Stephen, E. J., Melbourne—
Seeds from India.
- Stinton, W., Geelong—
Native plants and seeds.
- Stirling, J., Omeo—
Quantity herbarium specimens native plants.
- St. Petersburg Botanic Garden (Chevalier Dr. E. Regel, Director)—
Large and valuable collections of choice and rare seeds.
- Sullivan, D., Moyston—
Quantity of choice seeds and herbarium specimens of native plants.
- Sydney Botanic Gardens (Ch. Moore, Esq., Director)—
Two warden cases of plants and large collections of valuable seeds.
- Tasmanian Steam Navigation Company (C. Hudson, Esq.)—
Free freight on consignments to and from Tasmania.
- Taylor, W., Camperdown—
Choice seeds and plants.
- Taylor and Sangster, Toorak—
Choice and valuable plants, cuttings, &c.
- Technological Museum, Melbourne (J. C. Newbery, Esq., Director)—
Plants and numerous specimens of economic botany.
- Thatcher, R., Sydney—
Quantity of New Zealand ferns, seeds.
- Thomson, J., Camperdown—
Quantity of valuable seed.
- Tobin, Mrs., Richmond—
Flower seeds.
- Trail, G. H., Brighton—
Choice seeds.
- Veitch, J., and Sons, London—
Rare and valuable plants.
- Verdon, Hon. Sir George, K.C.M.G., Macedon—
Plants and seeds in quantity.
- Victoria Racing Club (per H. Byron Moore, Esq., Secretary)—
Large quantities of valuable loam for azalea beds, &c., &c.
- Vilmorin, Andrieux, and Co., Paris—
Large collections of new and rare bulbs, choice seeds, &c., &c.
- Voutte, E. J., Netherlands—
Large collection of flower and other seeds, as exhibited at the Melbourne International Exhibition.
- Walters, C., Melbourne—
Spores of native ferns.
- Washington Agricultural Department, United States, America—
Large and valuable collections of seeds.
- Welsh, R. S., Lake Rowan—
Seeds of native plants.
- West Australia, Commissioners for, International Exhibition, Melbourne—
Rustic pagoda, constructed of the native woods of West Australia.
- Whitelaw, G. M., Melbourne—
Few birds (starlings), for liberation in the Gardens.
- Wilhelmi, C., Dresden, Saxony—
Large collection of choice flower seeds.
- Williams, H. J., Benalla—
Seeds of native plants.
- Willis, G. W., Kerang—
Native seeds.
- Wilson, A. H., Queensland—
Seeds and plants.
- Wilson, C. A., Adelaide—
Horticultural periodicals.
- Winter, W. Irving, Nooralim, Murchison—
Valuable seeds and plants.
- Winter, James, Dhurringile, Murchison—
Valuable seeds.
- Withers, R. J., Great Western—
Seeds.
- Whittingham, G., Caulfield—
Choice seeds, bulbs, plants, &c.
- Wragg, G., South Yarra—
Valuable cuttings.
- Wythes, T., South Yarra—
Packing material.